SECTION 05 5350

METAL GRATINGS AND FLOOR PLATES

LANL MASTER SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the ESM Structural POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Specification developed for ML-3 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Formed steel gratings.
- B. Formed aluminum gratings.
- C. Molded glass fiber gratings.
- D. Fabricated steel floor plates.

1.2 DESIGN REQUIREMENTS

- A. Use NAAMM A202.1 for design loads.
- B. Design for live load of [100 psf].
- C. Maximum deflection under live load is 1/240 of span.

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01 3300, Submittal Procedures:
 - 1. Catalog data with details of grate construction, and span and deflection tables.

PART 2 PRODUCTS

2.1 GRATING MATERIALS

- A. [Use formed and galvanized steel conforming to ASTM A36, G90.]
- B. [Use formed aluminum conforming to ASTM B221, Alloy 6063-T6.]

If glass fiber grating will be exposed to harsh chemicals, select the plastic binder to resist them.

- C. Use molded glass fiber reinforced plastic conforming to [].
 - D. Provide appropriate anchorage and splicing fittings.

2.2 FLOOR PLATE MATERIALS

A. Use diamond plate galvanized steel sheet conforming to ASTM A526, G90.

2.3 GRATING FABRICATION

- A. Fabricate grating to accommodate design loads.
- B. Mechanically clinch joints of intersecting metal grating sections.
- C. Provide non-slip top surface.

2.4 FLOOR PLATE FABRICATION

- A. Shear steel plate to size required, and grind edges to provide an "eased" edge.
- B. Galvanize after cutting and grinding.

PART 3 EXECUTION

3.1 INSPECTION

- A. Verify that opening sizes and dimensional variations are acceptable to receive grating [floor plates].
- B. Verify that supports are correctly positioned.

3.2 INSTALLATION

- A. Install components in correct position, plumb and level.
- B. Secure to prevent movement with appropriate fittings.

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This project specification is based on LANL Master Specification 05 5350 Rev. 0, dated January 6, 2006.